

AWARD/CONTRACT		1. This Contract Is A Rated Order Under DPAS (15 CFR 700)		Rating DOA4		Page 1 Of 20	
2. Contract (Proc. Inst. Ident) No. W56HZV-04-C-0100		3. Effective Date 2003DEC16		4. Requisition/Purchase Request/Project No. SEE SCHEDULE			
5. Issued By TACOM WARREN BLDG 231 AMSTA-AQ-ABGD PHILLIP LAWRENCE (586)574-5273 WARREN, MICHIGAN 48397-5000 HTTP://CONTRACTING.TACOM.ARMY.MIL e-mail address: LAWRENCPT@TACOM.ARMY.MIL		Code W56HZV		6. Administered By (If Other Than Item 5) DCMA SANTA ANA 34 CIVIC CENTER PLAZA ROOM 813A SANTA ANA CA 92701-4056 SCD C PAS NONE ADP PT HQ0339		Code S0513A	
7. Name And Address Of Contractor (No. Street, City, County, State, And Zip Code) PHYSICAL OPTICS CORPORATION 20600 GRAMERCY PLACE SUITE #103 TORRANCE, CA. 90501-1821 TYPE BUSINESS: Other Small Business Performing in U.S.				8. Delivery <input type="checkbox"/> FOB Origin <input checked="" type="checkbox"/> Other (See Below) SEE SCHEDULE			
				9. Discount For Prompt Payment			
Code 0AZ36 Facility Code				10. Submit Invoices (4 Copies Unless Otherwise Specified) To The Address Shown In:		Item 12	
11. Ship To/Mark For SEE SCHEDULE		Code		12. Payment Will Be Made By DFAS - COLUMBUS CENTER DFAS-CO/WEST ENTITLEMENT OPERATIONS P.O. BOX 182381 COLUMBUS, OH 43218-2381		Code HQ0339	
13. Authority For Using Other Than Full And Open Competition: <input type="checkbox"/> 10 U.S.C. 2304(c)() <input type="checkbox"/> 41 U.S.C. 253(c)()				14. Accounting And Appropriation Data ACRN: AA 21 42040000046N6N7EP665502255Y S20113 W56HZV			
15A. Item No. SEE SCHEDULE		15B. Schedule Of Supplies/Services CONTRACT TYPE: Firm-Fixed-Price		15C. Quantity		15D. Unit	
				15E. Unit Price		15F. Amount	
				KIND OF CONTRACT: Research and Development Contracts			
				15G. Total Amount Of Contract		\$69,990.00	
16. Table Of Contents							
(X)	Section	Description	Page(s)	(X)	Section	Description	Page(s)
Part I - The Schedule				Part II - Contract Clauses			
X	A	Solicitation/Contract Form	1	X	I	Contract Clauses	15
X	B	Supplies or Services and Prices/Costs	2	Part III - List Of Documents, Exhibits, And Other Attachments			
X	C	Description/Specs./Work Statement	6	X	J	List of Attachments	20
X	D	Packaging and Marking	7	Part IV - Representations And Instructions			
X	E	Inspection and Acceptance	8	K		Representations, Certifications, and Other Statements of Offerors	
X	F	Deliveries or Performance	9	L		Instrs., Conds., and Notices to Offerors	
X	G	Contract Administration Data	11	M		Evaluation Factors for Award	
X	H	Special Contract Requirements	13				
Contracting Officer Will Complete Item 17 Or 18 As Applicable							
17. <input checked="" type="checkbox"/> Contractor's Negotiated Agreement (Contractor is required to sign this document and return 2 signed copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award/contract, (b) the solicitation, if any, and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. (Attachments are listed herein.)				18. <input type="checkbox"/> Award (Contractor is not required to sign this document.) Your offer on Solicitation Number _____ including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the items listed above and on any continuation sheets. This award consummates the contract which consists of the following documents: (a) the Government's solicitation and your offer, and (b) this award/contract. No further contractual document is necessary.			
19A. Name And Title Of Signer (Type Or Print)				20A. Name Of Contracting Officer JOHN M. HOPFNER HOPFNERJ@TACOM.ARMY.MIL (586)574-7070			
19B. Name of Contractor		19c. Date Signed		20B. United States Of America		20C. Date Signed	
By _____ (Signature of person authorized to sign)				By _____ /SIGNED/ (Signature of Contracting Officer)		2003DEC16	
NSN 7540-01-152-8069 PREVIOUS EDITIONS UNUSABLE				25-106 GPO : 1985 0 - 478-632		Standard Form 26 (Rev. 4-85) Prescribed By GSA-FAR (4.8 CFR) 53.214(a)	

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Name of Offeror or Contractor: PHYSICAL OPTICS CORPORATION

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT						
	SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS										
0001	<div>SERVICES LINE ITEM</div> <div>SECURITY CLASS: Unclassified</div> <div>Contractor shall furnish all supplies and services to accomplish the tasks in their 26Jul03 proposal (see Section C)</div> <div>(End of narrative B001)</div>										
0001AA	<div>SERVICES LINE ITEM</div> <div>NOUN: FY04 NEW PH I PHYSICAL OPTICS PRON: E142C044EH PRON AMD: 01 ACRN: AA AMS CD: 665502M4055</div> <div>NOUN: Supplies/Services in support of first Bi monthly Progress/Status Report (A001) (see C.2.1)</div> <div>(End of narrative B001)</div> <div>Inspection and Acceptance</div> <div>INSPECTION: Destination ACCEPTANCE: Destination</div> <div>Deliveries or Performance</div> <table><thead><tr><th>DEL REL CD</th><th>QUANTITY</th><th>DAYS AFTER AWARD</th></tr></thead><tbody><tr><td>001</td><td>0</td><td>0060</td></tr></tbody></table> <div>\$ 23,330.00</div>	DEL REL CD	QUANTITY	DAYS AFTER AWARD	001	0	0060				\$ 23,330.00
DEL REL CD	QUANTITY	DAYS AFTER AWARD									
001	0	0060									
0001AB	<div>SERVICES LINE ITEM</div> <div>NOUN: FY04 NEW PH I PHYSICAL OPTICS PRON: E142C044EH PRON AMD: 01 ACRN: AA AMS CD: 665502M4055</div> <div>NOUN: Supplies/Services in support of second Bi monthly Progress/Status Report (A001) (SeeC.2.1)</div> <div>(End of narrative B001)</div> <div>Inspection and Acceptance</div> <div>INSPECTION: Destination ACCEPTANCE: Destination</div>				\$ 23,330.00						

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Name of Offeror or Contractor: PHYSICAL OPTICS CORPORATION

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001AC	<u>Deliveries or Performance</u>				
	<u>DEL REL CD</u> <u>QUANTITY</u> <u>DAYS AFTER AWARD</u>				
	001				

Name of Offeror or Contractor: PHYSICAL OPTICS CORPORATION

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002AB	<u>Inspection and Acceptance</u> INSPECTION: Destination ACCEPTANCE: Destination				
	<u>Deliveries or Performance</u> <u>DEL REL CD</u> <u>QUANTITY</u> <u>DAYS AFTER AWARD</u> 001 0 0060				
	<u>Service Option</u>				
	THIS OPTION SUBCLIN IS NOT CURRENTLY FUNDED AND PERFORMANCE IS NOT AUTHORIZED. SEE CLAUSE H.13, SECTIONS C AND SECTION F.				
	(End of narrative B001)				
	<u>Inspection and Acceptance</u> INSPECTION: Destination ACCEPTANCE: Destination				
	<u>Deliveries or Performance</u> <u>DEL REL CD</u> <u>QUANTITY</u> <u>DAYS AFTER AWARD</u> 001 0 0120				

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B.1 The payments under this contract will be in accordance with the subCLINs. The subCLINs (0001AA, 0001AB, and 0001AC) are set up to pay the contractor on the 2nd, 4th, and 6th months after contract award. The payment is contingent upon TACOM receiving and approving a DD Form 250 for the designated report in each subCLIN. The approved DD250 will be sent to the payment office by the Contracting Officer's Technical Representative so the contractor can be paid.

In the event the contracting officer exercises the option in H.13 then the subCLINs (0002AA & 0002AB)are set up for the contractor to be paid on the 2th and 4th months after award of the option. The COR will again approve the DD250 and send to the payment office for payment.

*** END OF NARRATIVE B 001 ***

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SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

C.2 SCOPE OF WORK (SOW)

C.2.1 Phase I, Basic Period: The Contractor, acting as an independent contractor and not as an agent of the Government, shall provide the necessary personnel, facilities, materials and services to complete the effort described in the Contractor's Proposal No.A032-0602 Lightweight Multi-Use Slipring, dated July 26, 2003, pages 7-13, Tasks 1 through 10, submitted under the Small Business Innovation Research (SBIR) Program, Topic Number A03-209.

C.2.2 Phase I, Option Period: In the event the Government later exercises the option in clause H.13, then the Contractor, acting as an independent contractor and not as an agent of the Government, shall provide the necessary personnel, facilities, materials and services to complete the effort described in contractor's Proposal No. A023-0602, dated July 26, 2003, page 13,, submitted under the SBIR Program, Topic Number A03-209.

C.3 DATA DELIVERABLES

C.3.1 Phase I, Basic Period, Progress Reports: The Contractor shall submit bi-monthly progress reports on all work completed to date, for a total of two (2) progress reports in the Phase I basic period, in accordance with (IAW) Exhibit A, Contract Data Requirements List (CDRL, DD Form 1423), Data Item Number A001.

C.3.2 Phase I, Basic Period, Technical Reports: The Contractor shall prepare and submit to the Government one (1) draft report and one (1) final report by the end of the Phase I basic period, IAW Exhibit A, CDRL (DD Form 1423), Data Item Number A002.

C.3.3 Phase I, Option Period, Progress Report: If the Government exercises the option in Section H.13, the Contractor shall submit a progress report by the end of the second (2nd) month of option effort, for a total of one (1) progress report in the Phase I option period, IAW Exhibit A, CDRL (DD Form 1423), Data Item Number A003.

C.3.4 Phase I, Option Period, Technical Reports: If the Government exercises the option in Section H.13, the Contractor shall prepare and submit to the Government one (1) draft report and one (1) final report by the end of the Phase I option period, IAW Exhibit A, CDRL (DD Form 1423), Data Item Number A004.

C.4 MEETINGS

C.4.1 Phase I Kick-Off Meeting: The Contractor shall initiate and coordinate a Kick-Off meeting by telephone with the Contracting Officer's Representative (COR) no later than one (1) month after contract award. One week prior to the meeting, the Contractor shall notify the Administrative Contracting Officer (ACO) and Contract Specialist when the meeting will occur, so those individuals may participate if available. At the meeting, the Contractor shall discuss its intended approach for accomplishing the contract SOW.

C.4.2 Phase I, Option Period, Review Meeting: If the Government exercises the option (Section H.13) before the end of the six month Phase I basic period, the Contractor shall plan and conduct a one (1) day review meeting at TACOM, Warren, MI, in the fourth (4th) month after the end of the Phase I basic period. If the Government exercises the option (Section H.13) after the end of the six month Phase I basic period, the Contractor shall plan and conduct a review meeting at TACOM, Warren, MI, in the fourth (4th) month after the option exercise date. The Contractor shall coordinate this meeting with the TACOM COR, and shall notify the ACO and Contract Specialist two weeks prior to the meeting, so those individuals may participate if available. The Contractor shall use the meeting to summarize the Phase I basic period and Phase I option period effort, and shall include recommendations for potential future work.

*** END OF NARRATIVE C 001 ***

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SECTION D - PACKAGING AND MARKING

SECTION D - PACKAGING AND MARKING

D.1. PACKAGING AND PACKING

All items deliverable under this contract shall be packaged and packed in accordance with standard commercial practice in order to assure arrival at Destination without damage or loss.

D.2 MARKING

All technical data deliverable under this contract shall be identified by this contract W56HZV-04-C-0100, the name and address of the prime contractor, and where applicable, the name and address of the subcontractor who generated the data.

*** END OF NARRATIVE D 001 ***

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SECTION E - INSPECTION AND ACCEPTANCE

	<u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
E-1	52.246-9	INSPECTION OF RESEARCH AND DEVELOPMENT (SHORT FORM)	APR/1984
E-2	52.246-4030 (TACOM)	INSPECTION POINT: DESTINATION	AUG/1994

We'll make our Procurement Quality Assurance inspection at the destination(s) listed in the Schedule. We'll be checking the supplies to make sure they conform with applicable drawings and specifications.

[End of Clause]

E-3	52.246-4031 (TACOM)	ACCEPTANCE POINT: DESTINATION	AUG/1994
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The Government will accept the supplies at the destination(s) listed in the Schedule.

[End of Clause]

SECTION F - DELIVERIES OR PERFORMANCE

	<u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
F-1	52.242-15	STOP-WORK ORDER	AUG/1989
F-2	52.242-17	GOVERNMENT DELAY OF WORK	APR/1984
F-3	52.247-34	F.O.B. DESTINATION	NOV/1991
	F.1	Delivery	
	F.1.1	Data	
	F.1.2	The delivery schedule for the data items is as follows:	

<u>DATA ITEM</u>	<u>DELIVERY DATE</u>
CLIN 0001AA 1st Bi-Monthly Progress/Status Report (A001)	60 Days After Award
CLIN 0001AB 2nd Bi- Monthly Progress/Status Report (A001)	120 Days After Award
CLIN 0001AC Technical Report (A002)	180 Days After Award

F.1.3 All data deliverables under this contract shall be delivered electronically to the email addresses specified in the Contract Data Requirements List (CDRL) DD Form 1423.

F.1.4 Option:

F.1.4.1 This option may be exercised in whole or in part, by contract modification, issued at any time between award of the contract and nine months thereafter.

F.1.4.2 The period of performance for the option is four (4) months after exercise of the option (unless the option is exercised sooner than 6 months after award, in which case the option performance period will begin at the end of the sixth month after contract award).

F.1.4.3 In the event the option is exercised by the Government, the following schedule shall apply:

<u>DATA ITEM</u>	<u>DELIVERY DATE</u>
CLIN 0002AA 6th Monthly Progress/Status Report (A001)	60 Days After beginning of performance of option work
CLIN 0002AB Update of Final Technical Report (A002)	120 Days After beginning of performance of option work

Period of Performance

F.2.1 All work required under this contract, excluding work resulting from option call-up, shall be completed within 180 days after contract award.

F.2.2 Final Scientific and Technical Report

F.2.3 The Contractor shall submit a draft Scientific and Technical Report within 157 days (5 months and 7 days) after contract award.

F.2.4 The Government shall review the draft report within 7 days of its receipt and return it to the contractor with comments and requests for changes.

F.2.5. The contractor shall submit the Final Scientific and Technical Report, in electronic format, within 14 days after receipt of the Government's approval of or comments on, the draft.

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*** END OF NARRATIVE F 001 ***

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SECTION G - CONTRACT ADMINISTRATION DATA

LINE	PRON/ AMS CD/ MIPR	ACRN	STAT	OBLG	ACCOUNTING CLASSIFICATION	JOB ORDER	ACCOUNTING STATION	OBLIGATED AMOUNT
ITEM						NUMBER		
0001AA	E142C044EH	AA	2	21	42040000046N6N7EP665502255Y S20113	42C044	W56HZV \$	23,330.00
	665502M4055							
0001AB	E142C044EH	AA	2	21	42040000046N6N7EP665502255Y S20113	42C044	W56HZV \$	23,330.00
	665502M4055							
0001AC	E142C044EH	AA	2	21	42040000046N6N7EP665502255Y S20113	42C044	W56HZV \$	23,330.00
	665502M4055							
							TOTAL \$	69,990.00

SERVICE NAME	TOTAL BY ACRN	ACCOUNTING CLASSIFICATION	ACCOUNTING STATION	OBLIGATED AMOUNT
Army	AA	21 42040000046N6N7EP665502255Y S20113	W56HZV	\$ 69,990.00
			TOTAL	\$ 69,990.00

Regulatory Cite	Title	Date
G-1	52.242-4016 COMMUNICATIONS (TACOM)	MAY/2000

(a) Communications on technical matters pertaining to the contract shall be direct between the contractor and the Technical Representative. Communications for the Technical Representative shall be addressed to:

Name: Mitchell Cross
e-mail:crossm@tacom.army.mil

(b) The Administrative Contracting Officer's (ACO) name and email address are also provided if known at this time:

ACO: Ron D. Cabrera
e-mail:Ron.Cabrera@dcma.mil

(c) Please see the appointment letters prepared at time of contract award for functions the Technical Representative and ACO will perform on this contract.

[End of Clause]

G-2	252.201-7000	CONTRACTING OFFICER'S REPRESENTATIVE	DEC/1991
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(a) Definition. Contracting Officer's Representative means an individual designated in accordance with subsection 201.602-2 of the Defense Federal Acquisition Regulation Supplement and authorized in writing by the contracting officer to perform specific technical or administrative functions.

(b) If the Contracting Officer designates a contracting officer's representative (COR), the Contractor will receive a copy of the written designation. It will specify the extent of the COR's authority to act on behalf of the contracting officer. The COR is not authorized to make any commitments or changes that will affect price, quality, quantity, delivery, or any other term or condition of the contract.

[End of Clause]

G-3	52.227-4004 (TACOM)	RELEASE OF INFORMATION	OCT/2003
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The contractor shall ensure that he complies with the requirements of Chapter 5, page 22, paragraph 5-48, of AR 360-1, The Army Public Affairs Program, dated 15 Oct 2000, prior to contemplated release of any procurement information. Approval of the Contracting Officer is required prior to release of any such information. AR 360-1 may be found at

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http://www.usapa.army.mil/pdffiles/r360_1.pdf
.

[End of clause]

G.3 (TACOM) SPECIAL PAYING INSTRUCTIONS: PAY OLDEST MONEY FIRST (MAR 2000)

This contract currently is funded (or later will be funded) by two or more separate funding documents, as shown in Section G of the contract by the presence of more than one long-line accounting classification for the Contract Line Item Numbers (CLINs) in the contract schedule. The funding represents (or later will represent) appropriations made available for obligation in more than one fiscal year.

In order for disbursements under the contract to be paid appropriately, the following requirements apply to the paying office:

The PAYING OFFICE: shall determine the total amount requested on each invoice or payment voucher received against the contract. Each payment shall be made against the oldest funding line(s) in the contract for which funds remain available. If the oldest fiscal year is represented by two or more accounting lines that still contain funds, payment shall be made equally against all accounting lines representing the oldest fiscal year until such lines are completely disbursed.

First example: the contract includes one accounting line from fiscal year 1999 and two accounting lines from fiscal year 2000. Result: disbursements against new invoices are made on the fiscal 1999 accounting line until it is completely disbursed, before any disbursements are made against the fiscal year 2000 accounting lines. Once disbursements start against the fiscal year 2000 lines, those payments will be split equally between the two available fiscal 2000 lines.

Second example: the contract includes four accounting lines from fiscal year 1999 and one accounting line from fiscal year 2000. Result: disbursements against new invoices are made and recorded equally against each of the four fiscal 1999 accounting lines. If one of the 1999 accounting lines becomes completely disbursed but money remains available on other 1999 lines, then payment on subsequent invoices will be made and recorded equally among the remaining 1999 lines until they become completely disbursed, before disbursements are made against the fiscal year 2000 line.

*** END OF NARRATIVE G 001 ***

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SECTION H - SPECIAL CONTRACT REQUIREMENTS

	Regulatory Cite	Title	Date
H-1	252.204-7000	DISCLOSURE OF INFORMATION	DEC/1991
H-2	252.204-7002	PAYMENT FOR SUBLINE ITEMS NOT SEPARATELY PRICED	DEC/1991
H-3	252.225-7002	QUALIFYING COUNTRY SOURCES AS SUBCONTRACTORS	APR/2003
H-4	252.227-7036	DECLARATION OF TECHNICAL DATA CONFORMITY	JAN/1997
H-5	252.227-7037	VALIDATION OF RESTRICTIVE MARKINGS ON TECHNICAL DATA	SEP/1999
H-6	252.231-7000	SUPPLEMENTAL COST PRINCIPLES	DEC/1991
H-7	252.235-7011	FINAL SCIENTIFIC OR TECHNICAL REPORT	SEP/1999
H-8	252.246-7000	MATERIAL INSPECTION AND RECEIVING REPORT	MAR/2003
H-9	252.246-7001	WARRANTY OF DATA	DEC/1991
H-10	252.227-7039	PATENTS -- REPORTING OF SUBJECT INVENTIONS	APR/1990

The Contractor shall furnish the Contracting Officer the following:

(a) Interim reports every twelve (12) months (or such longer period as may be specified by the Contracting Officer) from the date of the contract, listing subject inventions during that period and stating that all subject inventions have been disclosed or that there are no such inventions.

(b) A final report, within three (3) months after completion of the contracted work, listing all subject inventions or stating that there were no such inventions.

(c) Upon request, the filing date, serial number and title, a copy of the patent application and patent number, and issue data for any subject invention for which the Contractor has retained title.

(d) Upon request, the Contractor shall furnish the Government an irrevocable power to inspect and make copies of the patent application file.

(End of clause)

H-11	52.204-4005 (TACOM)	REQUIRED USE OF ELECTRONIC CONTRACTING	DEC/2002
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(a) All contract awards, modifications and delivery orders issued by TACOM will be issued electronically. The contractor has the option to receive these actions either via the Worldwide Web (WWW) or Electronic Data Interchange (EDI). Many provisions and clauses appear "by reference," meaning only clause titles and regulation site are listed; their full texts can be found at the website <http://farsite.hill.af.mil/>

(b) In order to be eligible to receive an award under this solicitation, the successful offeror must be registered with the Department of Defense (DOD) Central Contractor Registration (CCR). The CCR registration process may be done electronically at the World Wide Web (WWW) site: <http://www.ccr.gov/>. (In order to be registered to use EDI, you must use the long form for registration. Certification information, including information on the EDI 838 TPP, must be furnished to the Contracting Officer within 60 calendar days after contract award to complete networking requirements within the Government.)

(c) Worldwide Web Distribution. The contractor will receive an electronic Notice of the Award, Modification, or Delivery Order via e-mail. If you choose the WWW option, you must download the file from the appropriate TACOM webpage:

Warren: http://contracting.tacom.army.mil/awards_official.htm
Rock Island: <http://aaais.ria.army.mil/AAIS/AWDINFO/index.htm>
Picatinny: <http://procnet.pica.army.mil/Contracts/Index.htm>
Red River Army Depot: <http://www.redriver.army.mil/contracting/Awards>
Anniston Army Depot: <http://www.anadprocnet.army.mil>

(d) Electronic Data Interchange. If you choose to receive contract awards, modifications and delivery orders through EDI, they will be delivered electronically via the Federal Acquisition Network (FACNET). Federal Standard Version 3050 of Standard X12 from the American National Standards Institute (ANSI) will be used as the format for these electronic transactions.

(1) You must complete the EDI 838 Trading Partner Profile, and must agree (i) to subcontract with a DoD certified VAN or Value Added Service (VAS) provider, or (ii) to become DoD certified as a Value Added Network (VAN). The EDI 838 Training Partner Profile is contained in the basic CCR registration form and includes portions of the registration form which are titled "Optional".

(2) You must select a VAN from the official DoD approved list. DoD Certified VANs are listed at <http://www.acq.osd.mil/ec/ecip/index.htm>. If your VAN is later removed from the official list, or if you voluntarily drop your

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initially selected VAN, then you must switch to a VAN that remains on the official DoD approved list. You must maintain an active account on a DoD approved VAN for the entire duration of the contract, beginning no later than the 60th day after award.

(e) Unless otherwise specified elsewhere in the contract, all data items you are required to provide under this contract must be submitted electronically. Acceptable formats include:

- (1) Microsoft* 97 Office Products (TACOM can currently read OFFICE 97* and lower.): Word, Excel, Powerpoint, or Access
- (2) 100 OR 250 MEGABYTE ZIP*-DISK, 3 1/2 INCH DISK, OR 650 MEGABYTE CD ROM
- (3) E-MAIL (Maximum size of each e-mail message is be three and one-half (3.5) megabytes).

(4) Other electronic formats. Before submitting your data in any other electronic format, please e-mail the buyer identified on the face of the contract, with e-mail copy-furnished to amsta-idg@tacom.army.mil, to obtain a decision as to the format's acceptability. This e-mail must be received by the buyer not later than ten calendar days before the required data submission date.

NOTE: The above formats may be submitted in compressed form using self-extracting files.

(f) Additional information can be obtained by sending a message to: acqcenweb@tacom.army.mil or by calling (586) 574-7059.
[End of Clause]

H-12	52.246-4026	LOCAL ADDRESSES FOR DD FORM 250	MAR/2002
	(TACOM)		

(a) The contractor must provide a copy of each Material Inspection and Receiving Report (DD 250) pertaining to this contract, to the addresses given below, using either of the following methods:

- (1) Our first preference is for you to use electronic mail (e-mail), using the following e-mail address:

DD250@tacom.army.mil
- (2) Our second preference is for you to use data facsimile (datafax) transmission, using this fax number:

(586) 574-7552 and use "DD250 mailbox" in the "to:" block of your fax cover or header sheet.

In either method, do not mix DD250s from more than one contract in a single transmmission. That is, you may submit multiple DD250s in a single transmission, but they must all be against the same contract.

(b) These copies meet the requirements for the Purchasing Office copy and the Army Inventory Control Manager copy listed in tables 1 and 2 of DFARS Appendix F.

(c) The DD250 form may be found, in three different formats, on the World Wide Web at <http://webl.whs.osd.mil/icdhome/DD-0999.htm>
[End of Clause]

H.13 Exercise of Phase I Option

H.13.1 The Government reserves the right to unilaterally exercise the option for CLIN 0002 at the amount shown in Section B (CLIN 0002AA) by modification. The Contracting Officer may exercise this option in whole or in part, by contract modification, issued at any time between award and nine months thereafter.

H.13.2 In the event that the Government exercises the option, the Contractor must complete the efforts identified as 'Phase I Option' in its proposal dated 26 Jul 03, Small Business Innovation Research Program (SBIR), Proposal Number A032-0602, Proposal Title: Lightweight Multifunction Slipring.

CONTINUATION SHEET	Reference No. of Document Being Continued		Page 15 of 20
	PIIN/SIIN	MOD/AMD	
Name of Offeror or Contractor: PHYSICAL OPTICS CORPORATION			

SECTION I - CONTRACT CLAUSES

	Regulatory Cite	Title	Date
I-1	52.202-1	DEFINITIONS	DEC/2001
I-2	52.203-3	GRATUITIES	APR/1984
I-3	52.203-5	COVENANT AGAINST CONTINGENT FEES	APR/1984
I-4	52.203-6	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT	JUL/1995
I-5	52.203-7	ANTI-KICKBACK PROCEDURES	JUL/1995
I-6	52.203-8	CANCELLATION, RESCISSION AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY	JAN/1997
I-7	52.203-10	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY	JAN/1997
I-8	52.203-12	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS	JUN/2003
I-9	52.204-4	PRINTING/COPYING DOUBLE-SIDED ON RECYCLED PAPER	AUG/2000
I-10	52.209-6	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT	JUL/1995
I-11	52.211-15	DEFENSE PRIORITY AND ALLOCATION REQUIREMENTS	SEP/1990
I-12	52.215-2	AUDIT AND RECORDS - NEGOTIATIONS	JUN/1999
I-13	52.215-8	ORDER OF PRECEDENCE--UNIFORM CONTRACT FORMAT	OCT/1997
I-14	52.215-11	PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA--MODIFICATIONS	OCT/1997
I-15	52.215-13	SUBCONTRACTOR COST OR PRICING DATA -- MODIFICATIONS	OCT/1997
I-16	52.215-14	INTEGRITY OF UNIT PRICES (ALTERNATE I, (OCT 1997))	OCT/1997
I-17	52.219-8	UTILIZATION OF SMALL BUSINESS CONCERNS	OCT/2000
I-18	52.219-14	LIMITATIONS ON SUBCONTRACTING	DEC/1996
I-19	52.222-1	NOTICE TO THE GOVERNMENT OF LABOR DISPUTES	FEB/1997
I-20	52.222-21	PROHIBITION OF SEGREGATED FACILITIES	FEB/1999
I-21	52.222-26	EQUAL OPPORTUNITY	APR/2002
I-22	52.222-35	AFFIRMATIVE ACTION FOR DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA	DEC/2001
I-23	52.222-36	AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES	JUN/1998
I-24	52.222-37	EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS	DEC/2001
I-25	52.223-6	DRUG FREE WORKPLACE	MAY/2001
I-26	52.223-14	TOXIC CHEMICAL RELEASE REPORTING	AUG/2003
I-27	52.225-13	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES	JUN/2003
I-28	52.227-1	AUTHORIZATION AND CONSENT (ALTERNATE I dated April 1984)	JUL/1995
I-29	52.227-2	NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT	AUG/1996
I-30	52.227-11	PATENT RIGHTS--RETENTION BY THE CONTRACTOR (SHORT FORM)	JUN/1997
I-31	52.229-3	FEDERAL, STATE, AND LOCAL TAXES	APR/2003
I-32	52.229-5	TAXES--CONTRACTS PERFORMED IN U.S. POSSESSIONS OR PUERTO RICO	APR/1984
I-33	52.232-2	PAYMENTS UNDER FIXED-PRICE RESEARCH AND DEVELOPMENT CONTRACTS	APR/1984
I-34	52.232-8	DISCOUNTS FOR PROMPT PAYMENT	FEB/2002
I-35	52.232-9	LIMITATION ON WITHHOLDING OF PAYMENTS	APR/1984
I-36	52.232-11	EXTRAS	APR/1984
I-37	52.232-17	INTEREST	JUN/1996
I-38	52.232-23	ASSIGNMENT OF CLAIMS	JAN/1986
I-39	52.232-25	PROMPT PAYMENT	FEB/2002
I-40	52.232-33	PAYMENT BY ELECTRONIC FUNDS TRANSFER--CENTRAL CONTRACTOR REGISTRATION	OCT/2003
I-41	52.233-1	DISPUTES	JUL/2002
I-42	52.233-3	PROTEST AFTER AWARD	AUG/1996
I-43	52.242-13	BANKRUPTCY	JUL/1995
I-44	52.243-1	CHANGES--FIXED-PRICE (ALTERNATE V (APR 1984))	AUG/1987
I-45	52.243-7	NOTIFICATION OF CHANGES	APR/1984
I-46	52.244-5	COMPETITION IN SUBCONTRACTING	DEC/1996
I-47	52.246-23	LIMITATION OF LIABILITY	FEB/1997
I-48	52.249-2	TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE)	SEP/1996
I-49	52.249-9	DEFAULT (FIXED-PRICE RESEARCH AND DEVELOPMENT)	APR/1984
I-50	52.253-1	COMPUTER GENERATED FORMS	JAN/1991
I-51	252.203-7001	PROHIBITION ON PERSONS CONVICTED OF FRAUD OR OTHER DEFENSE CONTRACT-RELATED FELONIES	MAR/1999
I-52	252.204-7003	CONTROL OF GOVERNMENT PERSONNEL WORK PRODUCT	APR/1992
I-53	252.209-7000	ACQUISITION FROM SUBCONTRACTORS SUBJECT TO ON-SITE INSPECTION UNDER THE INTERMEDIATE-RANGE NUCLEAR FORCES (INF) TREATY	NOV/1995
I-54	252.209-7004	SUBCONTRACTING WITH FIRMS THAT ARE OWNED OR CONTROLLED BY THE GOVERNMENT OF A TERRORIST COUNTRY per DoD interim rule, Federal Register 27 Mar 98	MAR/1998

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-04-C-0100 MOD/AMD	Page 16 of 20
Name of Offeror or Contractor: PHYSICAL OPTICS CORPORATION		

	Regulatory Cite	Title	Date
I-55	252.215-7000	PRICING ADJUSTMENTS	DEC/1991
I-56	252.225-7012	PREFERENCE FOR CERTAIN DOMESTIC COMMODITIES	FEB/2003
I-57	252.225-7017	PROHIBITION ON AWARD TO COMPANIES OWNED BY THE PEOPLE'S REPUBLIC OF CHINA	FEB/2000
I-58	252.225-7031	SECONDARY ARAB BOYCOTT OF ISRAEL	APR/2003
I-59	252.227-7016	RIGHTS IN BID OR PROPOSAL INFORMATION	JUN/1995
I-60	252.227-7017	IDENTIFICATION AND ASSERTION OF USE, RELEASE, OR DISCLOSURE RESTRICTIONS	JUN/1995
I-61	252.227-7018	RIGHTS IN NONCOMMERCIAL TECHNICAL DATA AND COMPUTER SOFTWARE-- SMALL BUSINESS INNOVATIVE RESEARCH (SBIR) PROGRAM	JUN/1995
I-62	252.227-7019	VALIDATION OF ASSERTED RESTRICTIONS--COMPUTER SOFTWARE	JUN/1995
I-63	252.227-7030	TECHNICAL DATA--WITHHOLDING OF PAYMENT	MAR/2000
I-64	252.227-7034	PATENTS--SUBCONTRACTS	APR/1984
I-65	252.232-7006	REDUCTION OR SUSPENSION OF CONTRACT PAYMENTS UPON FINDING OF FRAUD	AUG/1992
I-66	252.242-7000	POSTAWARD CONFERENCE	DEC/1991
I-67	252.243-7001	PRICING OF CONTRACT MODIFICATIONS	DEC/1991
I-68	252.243-7002	REQUESTS FOR EQUITABLE ADJUSTMENT	MAR/1998
I-69	252.244-7000	SUBCONTRACTS FOR COMMERCIAL ITEMS AND COMMERCIAL COMPONENTS (DoD CONTRACTS)	MAR/2000
I-70	52.252-6	AUTHORIZED DEVIATIONS IN CLAUSES	APR/1984

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of (DEVIATION) after the date of the clause.

(b) The use in this solicitation or contract of any DoD FAR Supplement (DFARS) (48 CFR 2) clause with an authorized deviation is indicated by the addition of (DEVIATION) after the name of the regulation.

[End of Clause]

I-71	252.204-7004	REQUIRED CENTRAL CONTRACTOR REGISTRATION	NOV/2001
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(a) Definitions. As used in this clause--

(1) Central Contractor Registration (CCR) database means the primary DoD repository for contractor information required for the conduct of business with DoD.

(2) Data Universal Numbering System (DUNS) number means the 9-digit number assigned by Dun and Bradstreet Information Services to identify unique business entities.

(3) Data Universal Numbering System +4 (DUNS+4) number means the DUNS number assigned by Dun and Bradstreet plus a 4-digit suffix that may be assigned by a parent (controlling) business concern. This 4-digit suffix may be assigned at the discretion of the parent business concern for such purposes as identifying subunits or affiliates of the parent business concern.

(4) Registered in the CCR database means that all mandatory information, including the DUNS number or the DUNS+4 number, if applicable, and the corresponding Commercial and Government Entity (CAGE) code, is in the CCR database; the DUNS number and the CAGE code have been validated; and all edits have been successfully completed.

(b)

(1) By submission of an offer, the offeror acknowledges the requirement that a prospective awardee must be registered in the CCR database prior to award, during performance, and through final payment of any contract resulting from this solicitation, except for awards to foreign vendors for work to be performed outside the United States.

(2) The offeror shall provide its DUNS or, if applicable, its DUNS+4 number with its offer, which will be used by the Contracting Officer to verify that the offeror is registered in the CCR database.

(3) Lack of registration in the CCR database will make an offeror ineligible for award.

(4) DoD has established a goal of registering an applicant in the CCR database within 48 hours after receipt of a complete and accurate application via the Internet. However, registration of an applicant submitting an application through a method other than the Internet may take up to 30 days. Therefore, offerors that are not registered should consider applying for registration immediately

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upon receipt of this solicitation.

(c) The Contractor is responsible for the accuracy and completeness of the data within the CCR, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to confirm on an annual basis that its information in the CCR database is accurate and complete.

(d) Offerors and contractors may obtain information on registration and annual confirmation requirements by calling 1-888-227-2423, or via the Internet at <http://www.ccr.gov>.

[End of Clause]

I-72 252.247-7023 TRANSPORTATION OF SUPPLIES BY SEA MAY/2002

(a) Definitions. As used in this clause--

(1) Components means articles, materials, and supplies incorporated directly into end products at any level of manufacture, fabrication, or assembly by the Contractor or any subcontractor.

(2) Department of Defense (DoD) means the Army, Navy, Air Force, Marine Corps, and defense agencies.

(3) Foreign flag vessel means any vessel that is not a U.S.-flag vessel.

(4) Ocean transportation means any transportation aboard a ship, vessel, boat, barge, or ferry through international waters.

(5) Subcontractor means a supplier, materialman, distributor, or vendor at any level below the prime contractor whose contractual obligation to perform results from, or is conditioned upon, award of the prime contract and who is performing any part of the work or other requirement of the prime contract. However, effective May 1, 1996, the term does not include a supplier, materialman, distributor, or vendor of commercial items or commercial components.

(6) Supplies means all property, except land and interests in land, that is clearly identifiable for eventual use by or owned by the DoD at the time of transportation by sea.

(i) An item is clearly identifiable for eventual use by the DoD if, for example, the contract documentation contains a reference to a DoD contract number or a military destination.

(ii) Supplies includes (but is not limited to) public works; buildings and facilities; ships; floating equipment and vessels of every character, type, and description, with parts, subassemblies, accessories, and equipment; machine tools; material; equipment; stores of all kinds; end items; construction materials; and components of the foregoing.

(7) U.S.-flag vessel means a vessel of the United States or belonging to the United States, including any vessel registered or having national status under the laws of the United States.

(b)

(1) The Contractor shall use U.S.-flag vessels when transporting any supplies by sea under this contract.

(2) A subcontractor transporting supplies by sea under this contract shall use U.S.-flag vessels if-

(i) This contract is a construction contract; or

(ii) The supplies being transported are-

(A) Noncommercial items; or

(B) Commercial items that-

(1) The Contractor is reselling or distributing to the Government without adding value (generally, the Contractor does not add value to items that it subcontracts for f.o.b. destination shipment);

(2) Are shipped in direct support of U.S. military contingency operations, exercises, or forces deployed in humanitarian or peacekeeping operations; or

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Name of Offeror or Contractor: PHYSICAL OPTICS CORPORATION

(3) Are commissary or exchange cargoes transported outside of the Defense Transportation System in accordance with 10 U.S.C. 2643.

(c) The Contractor and its subcontractors may request that the Contracting Officer authorize shipment in foreign-flag vessels, or designate available U.S.-flag vessels, if the Contractor or a subcontractor believes that--

- (1) U.S.-flag vessels are not available for timely shipment;
- (2) The freight charges are inordinately excessive or unreasonable; or
- (3) Freight charges are higher than charges to private persons for transportation of like goods.

(d) The Contractor must submit any request for use of other than U.S.-flag vessels in writing to the Contracting Officer at least 45 days prior to the sailing date necessary to meet its delivery schedules. The Contracting Officer will process requests submitted after such date(s) as expeditiously as possible, but the Contracting Officer's failure to grant approvals to meet the shipper's sailing date will not of itself constitute a compensable delay under this or any other clause of this contract. Requests shall contain at a minimum--

- (1) Type, weight, and cube of cargo;
- (2) Required shipping date;
- (3) Special handling and discharge requirements;
- (4) Loading and discharge points;
- (5) Name of shipper and consignee;
- (6) Prime contract number; and

(7) A documented description of efforts made to secure U.S.-flag vessels, including points of contact (with names and telephone numbers) with at least two U.S.-flag carriers contacted. Copies of telephone notes, telegraphic and facsimile message or letters will be sufficient for this purpose.

(e) The Contractor shall, within 30 days after each shipment covered by this clause, provide the Contracting Officer and the Division of National Cargo, Office of Market Development, Maritime Administration, U.S. Department of Transportation, Washington, DC 20590, one copy of the rated on board vessel operating carrier's ocean bill of lading, which shall contain the following information--

- (1) Prime contract number;
- (2) Name of vessel;
- (3) Vessel flag of registry;
- (4) Date of loading;
- (5) Port of loading;
- (6) Port of final discharge;
- (7) Description of commodity;
- (8) Gross weight in pounds and cubic feet if available;
- (9) Total ocean freight in U.S. dollars; and
- (10) Name of the steamship company.

(f) The Contractor shall provide with its final invoice under this contract a representation that to the best of its knowledge and belief--

- (1) No ocean transportation was used in the performance of this contract;
- (2) Ocean transportation was used and only U.S.-flag vessels were used for all ocean shipments under the contract;

<p align="center">CONTINUATION SHEET</p>	<p align="center">Reference No. of Document Being Continued</p> <p align="center">PIIN/SIIN W56HZV-04-C-0100 MOD/AMD</p>	<p align="center">Page 19 of 20</p>
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Name of Offeror or Contractor: PHYSICAL OPTICS CORPORATION

(3) Ocean transportation was used, and the Contractor had the written consent of the Contracting Officer for all non-U.S.-flag ocean transportation; or

(4) Ocean transportation was used and some or all of the shipments were made on non-U.S.-flag vessels without the written consent of the Contracting Officer. The Contractor shall describe these shipments in the following format:

ITEM	CONTRACT		
DESCRIPTION	LINE ITEMS	QUANTITY	TOTAL

(g) If the final invoice does not include the required representation, the Government will reject and return it to the Contractor as an improper invoice for the purposes of the Prompt Payment clause of this contract. In the event there has been unauthorized use of non-U.S.-flag vessels in the performance of this contract, the Contracting Officer is entitled to equitably adjust the contract, based on the unauthorized use.

(h) In the award of subcontracts for the types of supplies described in paragraph (b)(2) of this clause, the Contractor shall flow down the requirements of this clause as follows:

(1) The Contractor shall insert the substance of this clause, including this paragraph (h) in all subcontracts that exceed the simplified acquisition threshold in Part 2 of the Federal Acquisition Regulation.

(2) The Contractor shall insert the substance of paragraphs (a) through (e) of this clause, and this paragraph (h), in subcontracts that are at or below the simplified acquisition threshold in Part 2 of the Federal Acquisition Regulation.

[End of Clause]

I-73	252.247-7024	NOTIFICATION OF TRANSPORTATION OF SUPPLIES BY SEA	MAR/2000
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(a) The Contractor has indicated by the response to the solicitation provision, Representation of Extent of Transportation by Sea, that it did not anticipate transporting by sea any supplies. If however, after the award of this contract, the Contractor learns that supplies, as defined in the Transportation of Supplies by Sea clause of this contract, will be transported by sea, the Contractor--

(1) Shall notify the Contracting Officer of that fact; and

(2) Hereby agrees to comply with all the terms and conditions of the Transportation of Supplies by Sea clause of this contract.

(b) The Contractor shall include this clause, including this paragraph (b), revised as necessary to reflect the relationship of the contracting parties

(1) In all subcontracts hereunder, if this contract is a construction contract; or

(2) If this contract is not a construction contract, in all subcontracts under this contract that are for--

(i) Noncommercial items; or

(ii) Commercial items that--

- (A) The Contractor is reselling or distributing to the Government without adding value (generally, the Contractor does not add value to items that it subcontracts for f.o.b. destination shipment);
- (B) Are shipped in direct support of U.S. military contingency operations, exercises, or forces deployed in humanitarian or peacekeeping operations; or
- (C) Are commissary or exchange cargoes transported outside of the Defense Transportation System in accordance with 10 U.S.C. 2643.

[End of Clause]

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SECTION J - LIST OF ATTACHMENTS

<u>List of</u> <u>Addenda</u>	<u>Title</u>	<u>Date</u>	<u>Number</u> <u>of Pages</u>	<u>Transmitted By</u>
Exhibit A	CONTRACT DATA REQUIREMENTS LIST DD FORM 1423	04-DEC-2003	002	

CONTRACT DATA REQUIREMENT LIST

Form Approval OMB No. 0704-0188 Public reporting burden for this collection of information is estimated to average 440 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.A. CONTRACT LINE ITEM NO.: D. SYSTEM/ITEM.....: B. EXHIBIT: AE. CONTRACT/PR NO.: W56HZV-04-C-0100C. CATEGORY.....: F. CONTRACTOR.....: 1. DATA ITEM NO.: A0012. TITLE OF DATA ITEM: Contractors Progress, Status, and Management Report 3. SUBTITLE: Phase I Progress Reports 4. AUTHORITY: DI-MGMT-80227 5. CONTRACT REFERENCE: Section C C.3.16. REQUIRING OFFICE: AMSTA-TR-R/MS 264 9. DIST. STATEMENT REQUIRED.: 12. DATE OF FIRST SUB.: See Block 16 7. DD250 REQ: DD 10. FREQUENCY: See Block 16 13. DATE OF SUBS. SUB...: See Block 16 8. APP CODE: 11. AS OF DATE: See Block 1614. DISTRIBUTION A. ADDRESSEES

B. COPIES:DRAFTFINALMitchell Cross, Contracting Officers Representative (COR), E-mail: crossm@tacom.army.mil

1Phil

Lawrence, Contract Specialist, E-Mail: lawrencp@tacom.army.mil <<mailto:lawrencp@tacom.army.mil>>

1Ron D Cabrera,

Administrative Contracting Officer (ACO), E-mail: Ron.Cabrera@dcma.mil

1 15. TOTAL: 1 * * In distributing the electronic report, according to the schedule in Block 16 below, the Contractor shall deliver one (1) copy to the Government, sent to the above email addresses Specialist, and ACO) e-mail addresses.16. REMARKS: a. Basic Period: The Contractor shall deliver two (2) progress reports in the Phase I, Basic Period: the first report by two (2) months after the contract award date, and the second report by four (4) months after the contract award date. b. Option Period: The Contractor shall deliver one (1) progress report within the option performance period. If the Government exercises the option before the end of the Phase I Basic Period, the Contractor shall deliver one (1) progress report sixty (60) days from the end of the Phase I Basic Period. If the Government exercises the option after the end of the Phase I Basic Period, the Contractor shall deliver one (1) progress report within sixty (60) days after the option exercise date. c. These instructions apply to both Basic Period and Option Period Progress Reports: Complete the reports in accordance with (IAW) Data Item Description (DID) DI-MGMT-80227, Contractors Progress, Status, and Management Report. The COR is responsible for accepting or rejecting the Contractors Progress, Status, and Management Reports. See DID DI-MGMT-80227, at the internet address below, for instructions on completing the required report. (Note Tailoring: Insert Tailoring instructions, if any)

<http://astimage.daps.dla.mil/docimages/0001\48\17\DI80227.PD8> <<http://astimage.daps.dla.mil/docimages/0001\48\17\DI80227.PD8>> d.

Prepare the reports in the Contractors format. Submit the reports using any of the following electronic formats: (1)

Files readable using these Microsoft* 97 Office Products (TACOM can currently read OFFICE 97* and lower): Word, Excel, PowerPoint, or Access. Spreadsheets must be sent in a file format that includes all formulae, macro and format information. Print image is not acceptable. Executable files are unacceptable. (2) Files in Adobe PDF (Portable Document Format). Scanners should be set to 200 dots per inch. (3) Files in HTML (Hypertext Markup Language). HTML documents must not contain active links to live Internet sites or pages. All linked information must be contained within your electronic report, and be accessible offline.

(4) Other electronic formats. Before preparing your report in any other electronic format, please e-mail the COR, with an e-mail copy-furnished to amsta-idg@tacom.army.mil, to obtain a decision as to the formats acceptability. This e-mail must be received by the COR not later than ten calendar days before the draft reports due date. All alternate methods must be a no cost to the Government. NOTES:

(a) The above formats may be submitted in compressed form using self-extracting files. (b) Files may be read-only, password protected. e. Acceptable media: The Contractor shall submit reports via e-mail. If e-mail is not workable, other acceptable media include 100 or 250 Megabyte Zip*-disk, 3 inch disk, or 650 megabyte CD ROM. Identify the software application and version used to create each file submitted. (1) E-MAIL. Maximum size of each e-mail message shall be three and one-half (3.5) megabytes. Any compressed files must be self-extracting, and you must provide appropriate instructions. You may use multiple e-mail messages if necessary, however, you must annotate the subject lines in this manner: Message 1 of 3, 2 of 3, 3 of 3. (2) 100 or 250 MEGABYTE ZIP*-DISK, 3 INCH DISK, OR 650 MEGABYTE CD ROM via U.S. Mail or other carrier. The Contractor shall label and all submitted disks with the Contract number, the Contractors name and address, and a contacts phone number.

NOTE: Please select only one medium by which to transmit each report. For instance, do not submit a report via e-mail and 100 megabyte Zip*-disk. * Registered Trademark 18. ESTIMATED TOTAL PRICE :17. PRICE GROUP: 1. DATA ITEM NO.: A0022.

TITLE OF DATA ITEM: Scientific and Technical Reports 3. SUBTITLE: Phase I Draft and Final Technical Reports4. AUTHORITY: DI-MISC-80711A 5. CONTRACT REFERENCE: Section Cc.3.2 9. DIST. STATEMENT REQUIRED.: 12. DATE OF FIRST SUB: See Block 16 6. REQUIRING OFFICE: AMSTA-TR-R/MS 264 10. FREQUENCY: See Block 16 13. DATE OF SUBS. SUB.: See Block 16 7. DD250 REQ: DD 11. AS OF DATE: See Block 16 8. APP CODE: B. COPIES:DRAFTFINAL14. DISTRIBUTION

A. ADDRESSEES

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<mailto:Ron.Cabrera@dcma.mil>

115. TOTAL: 1 1 * * In distributing electronic copies of the final report, according to the schedule in Block 16 below, the Contractor shall deliver one (1) copy to the Government, sent to e-mail addresses above.16. REMARKS: a. Basic Period: The Contractor shall deliver one (1) draft Scientific and Technical Report, five (5) months and one (1) week after contract award. The draft report shall include a completed Standard Form (SF) 298 (Report Documentation Page) as the reports cover sheet. The COR shall review the draft report and return it to the Contractor within seven (7) days of receipt with comments. The Contractor shall submit one (1) final Scientific and Technical Report (with the completed SF 298) within fourteen (14) days after receipt of draft comments. b. Option Period: If the Government exercises the option before the end of the Phase I Basic Period, the Contractor shall deliver one (1) draft Scientific and Technical Report (with a completed SF 298) within three (3) months and one (1) week after the end of the Phase I Basic Period. If the Government exercises the option after the end of the Phase I Basic Period, the Contractor shall deliver one (1) draft Scientific and Technical Report (with a completed SF 298) within three (3) months and one (1) week after the option exercise date. The COR shall review the draft report and return it to the Contractor within seven (7) days of receipt with comments. The Contractor shall submit one (1) final Scientific and Technical Report (with the completed SF 298) within fourteen (14) days of receipt of draft comments. Note: The Phase I, Option Period Scientific and Technical Report can be an addendum to the Phase I, Basic Period Scientific and Technical Report, but it must discuss the work accomplished during the Phase I, Option Period, and explain how the Option Period effort ties into the Basic Period work and the planned Phase II effort. c. These instructions apply to both Basic Period and Option Period Technical Reports: Complete the reports IAW DID DI-MISC 80711A, Scientific and Technical Reports. The COR is responsible for accepting or rejecting the draft and final reports, and for submitting the approved final report to the Defense Technical Information Center (DTIC), in Ft. Belvoir, VA. See the data item description (DI-MISC-80711A), at the internet address below, for instructions on completing the required report. (Note Tailoring: Insert tailoring instructions, if any) <http://astimage.daps.dla.mil/docimages/0002\27\88\80711A.PD4> You may download the SF 298 form, from the following internet address: <http://www.dtic.mil/dtic/forms/sf298template.doc> You may download basic instructions for completing the SF 298 form, from the following internet address: http://www.dtic.mil/dtic/forms/SF298_MS67.doc <http://www.dtic.mil/dtic/forms/SF298_MS67.doc> Here are some additional instructions for completing the SF 298 form, that apply when submitting reports under the SBIR Program: For each unclassified report, the Contractor shall fill in Block 12a (Distribution/Availability Statement) of the SF 298 with one of the following statements: (a) Approved for public release; distribution unlimited. (b) Distribution authorized to U.S. Government Agencies only; contains proprietary information Note: After reviewing the Contractors entry in Block 12a, TACOM has final responsibility for assigning a distribution statement. Block 13 (Abstract) of the SF 298 must include the first sentence, Report developed under SBIR contract for topic (insert topic number) . The abstract must identify the purpose of the work and briefly describe the work carried out, the finding or results, and the potential applications of the effort. Since the Department of Defense (DOD) will be publishing the abstract, it must not contain any proprietary or classified data. Block 14 (Subject Terms) of the SF 298 must include the term SBIR Report. d. Prepare the reports in the Contractors format. Submit the reports using any of the following electronic formats: (1) Files readable using these Microsoft* 97 Office Products (TACOM can currently read OFFICE 97* and lower): Word, Excel, PowerPoint, or Access. Spreadsheets must be sent in a file format that includes all formulae, macro and format information. Print image is not acceptable. Executable files are unacceptable. (2) Files in Adobe PDF (Portable Document Format). Scanners should be set to 200 dots per inch. (3) Files in HTML (Hypertext Markup Language). HTML documents must not contain active links to live Internet sites or pages. All linked information must be contained within your electronic report, and be accessible offline. (4) Other electronic formats. Before preparing your report in any other electronic format, please e-mail the COR, with an e-mail copy-furnished to amsta-idq@tacom.army.mil, to obtain a decision as to the formats acceptability. This e-mail must be received by the COR not later than ten calendar days before the draft reports due date. All alternate methods must be a no cost to the Government. NOTES: (a) The above formats may be submitted in compressed form using self-extracting files. (b) Files may be read-only, password protected. e. Acceptable media: The Contractor shall submit reports via e-mail. If e-mail is not workable, other acceptable media include 100 or 250 Megabyte Zip*-disk, 3 inch disk, or 650 megabyte CD ROM. Identify the software application and version used to create each file submitted. (1) E-MAIL. Maximum size of each e-mail message shall be three and one-half (3.5) megabytes. Any compressed files must be self-extracting, and you must provide appropriate instructions. You may use multiple e-mail messages if necessary, however, you must annotate the subject lines in this manner: Message 1 of 3, 2 of 3, 3 of 3. (2) 100 or 250 MEGABYTE ZIP*-DISK, 3 INCH DISK, OR 650 MEGABYTE CD ROM via U.S. Mail or other carrier. The Contractor shall label and all submitted disks with the Contract number, the Contractors name and address, and a contacts phone number. NOTE: Please select only one medium by which to transmit each report. For instance, do not submit a report via e-mail and 100 megabyte Zip*-disk. * Registered Trademark 18. ESTIMATED TOTAL PRICE:17. PRICE GROUP:17. PRICE GROUP:17. PRICE GROUP: